

INPATIENT MEDICATIONS (IM)

TECHNICAL MANUAL / SECURITY GUIDE

Version 5.0 December 1997

(Revised April 2003)

Revision History

Any changes subsequent to the initial release of this manual are listed below. The users should update the manual with the pages listed under the Revised Pages column.

Date	Revised Pages	Patch Number	Description
04/03	Title, i, 6, 8- 13	PSJ*5*95 & Developer Request	Updated the Title Page and Revision History Page. Updated the NOW explanation in the DEFAULT START DATE CALCULATION. Added the new Inpatient Ward Parameter, PRE-EXCHANGE REPORT DEVICE.
01/03	Title, i, 21- 24, 34, 47, 91, 92, 92a, 92b	PSJ*5*85	Updated the Title Page and Revision History Page. New routines, protocols, and IAs were added. The <i>Barcode ID – Return and Destroy (IV)</i> option was included. Also included pages for double-sided printing.
05/02	All	PSJ*5*58	Updated this manual to include the IV functionality and BCMA – CPRS Med Order Button enhancements released with the BCMA V. 2.0 project.
01/02	i, ii, 35, 36	PSJ*5*65	Updated Revision History Page. The exported options list was updated to include the Free Text Dosage Report. Included pages for double-sided printing.
01/02	Title, i, ii, 5, 6, 7, 8, 9, 10, 69, 70, 95, 96, 97, 98	PSJ*5*63	Updated the Title Page, and Revision History Page. The Ward and System Parameters were updated to include the new parameters for determining the stop date for one-time orders. A new database integration agreement was added. Included pages for double-sided printing.
09/01	All	PSJ*5*50	Added this Revision History Page. Re-formatted the manual into sections. Added Patch Release changes and Pharmacy Ordering Enhancements (POE).
12/97			Original Released Technical Manual / Security Guide.

i

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- NON-FORMULARY MESSAGE This is a message that will be shown to non-pharmacists when they order drugs not currently stocked by the pharmacy. This is typically a warning, and describes a procedure the non-pharmacist must follow before the pharmacy will dispense the non-formulary drug.
 - **EDIT Option** This option is used to edit the NON-FORMULARY MESSAGE above.
- **PRINT 6 BLOCKS FOR THE PRN MAR** This field is used to indicate if 4 or 6 blocks are to be used for ONE-TIME/PRN (pro re nata Latin for "as needed") orders on the 7/14 DAY MAR ONE-TIME/PRN SHEET. The 7/14 DAY MAR ONE-TIME/PRN SHEET will print 4 blocks if this field is not set to **YES**.
- **PRINT DIET ABBR LABEL ON MAR** If this field contains a 1 or YES, the Dietetics Abbreviated Label will be printed on the MAR.
- MAR SORT If this field contains a 0, the MAR will be sorted by the order's Schedule Type* and then by Medication Names. When this field contains a 1, the MAR will be sorted by the order's Medication Names.
 - * Schedule Type is sorted based on the following orders:

Continuous MAR

----Unit Dose Orders:
Continuous
Fill on Request
IV Orders:
Piggyback or Syringe type
One-Time/PRN MAR
-----Unit Dose Orders:
One-time
PRN
IV Orders:
One-time
One-time

Admixture type PRN

Hyperal type Acknowledged Pending PRN orders

Chemo type

Acknowledged Pending Orders:

Inpatient Meds

IV fluids

- **ATC SORT PARAMETER** This parameter allows sending of the Pick List to the Automated Tablet Counter (ATC) machine by ATC mnemonic or admin time within patient.
- CALC UNITS NEEDED PRN ORDERS This field controls whether or not the units needed will be calculated for the orders with PRN in the SCHEDULE field (#26) of the UNIT DOSE sub- file (#55.06) of the PHARMACY PATIENT file (#55) on the Pick List. This information will show on the Pick List if this field is set to 1.
- **DAYS UNTIL STOP FOR ONE-TIME** This field indicates the number of days a one-time order should last. This field is only used if the ward parameter, DAYS UNTIL STOP FOR ONE-TIME, is not defined. This number can be between 1 and 30.

2.2.2. Fields from the INPATIENT WARD PARAMETERS file (#59.6)

Note: Fields from the INPATIENT WARD PARAMETERS file (#59.6) are still edited through the Inpatient Medications package.

- **WARD** This is a ward for which the site wants to tailor specific aspects of the Inpatient Medications package.
- **DAYS UNTIL STOP DATE/TIME** This is the number of days a standard order should last. The first order entered for a patient uses this number to calculate a default value for the order's STOP DATE/TIME field (#34) of the UNIT DOSE sub-file (#55.06) of the PHARMACY PATIENT file (#55). This number is also used if SAME STOP DATE ON ALL ORDERS parameter has no entry, or an entry of **NO**.
- DAYS UNTIL STOP FOR ONE-TIME This is the number of days a one-time order should last. The number can be from 1-100, however, it cannot exceed the number of days that standard orders last (DAYS UNTIL STOP DATE/TIME). When this parameter is not available, the system parameter, DAYS UNTIL STOP FOR ONE-TIME, will be used to determine the stop date. When neither parameter has been set, one-time orders will use the ward parameter, DAYS UNTIL STOP DATE/TIME, to determine the stop date instead of the start and stop date being equal.
- **SAME STOP DATE ON ALL ORDERS** This flag, if set to **YES**, uses the STOP DATE/TIME field (#34) of the UNIT DOSE sub-file (#55.06) of the PHARMACY PATIENT file (#55) from the patient's first order as a default value for these fields on all of the patient's following orders.
- TIME OF DAY THAT ORDERS STOP This is a time of day that, if found, is used in calculating the default value for the STOP DATE/TIME field (#34) of the UNIT DOSE subfile (#55.06) of the PHARMACY PATIENT file (#55) of patients' orders. This time is in military time format with leading and trailing zeros (0001 means 1 minute after midnight).
- **DEFAULT START DATE CALCULATION** This field allows the ward to determine how the default start date for orders should be calculated. The default may use the NEXT ADMIN TIME, the CLOSEST ADMIN TIME, or the login date/time of the order (NOW) as the default start date for Unit Dose and IV orders.
- START TIME FOR 24-HOUR MAR This is the start time for the 24-hour MAR. It is used whenever a user enters a start date without a time when running the 24-hour MAR. This time is in military time format with leading and trailing zeros (0001 means 1 minute after midnight).
- LABEL FOR WARD STAFF The following codes are used to select when labels will print for ward staff:

- **NO LABELS** Labels are not created when ward staff (nurses, clerks, physicians, etc.) take action on an order. Labels are always created for actions taken on orders after they are verified, unless NO LABELS is selected.
- FIRST LABEL ON ORDER ENTRY/EDIT Labels are created whenever ward staff enter an order or edit a non-verified order, but not when the nurse verifies an order
- FIRST LABEL ON NURSE VERIFICATION Labels are not created for ward staff until a nurse has verified the order.
- LABEL ON ENTRY/EDIT AND VERIFICATION Labels are created whenever the order is entered or edited and verified.
- WARD LABEL PRINTER If a device name is entered here, labels created by ward staff, due to actions taken on orders, will print automatically to the device.
- LABEL FOR PHARMACY The following codes are used to select when labels will print for the pharmacy staff:
 - **NO LABELS** Labels will not be created when the pharmacy staff (pharmacists and pharmacy technicians) take action on an order.
 - **FIRST LABEL ON ORDER ENTRY/EDIT** Labels will be created whenever the pharmacy staff enters an order or edits a non-verified order, but not when the pharmacist verifies an order.
 - LABEL ON ENTRY/EDIT AND VERIFICATION Labels are created whenever the order is entered or edited and verified.
 - **FIRST LABEL ON PHARMACIST VERIFICATION** Labels will not be created for the pharmacy staff until a pharmacist has verified the order.
- **PHARMACY LABEL PRINTER** If a device name is entered here, labels created by the pharmacy staff, due to actions taken on orders, will print automatically to the device.
- LABEL ON AUTO-DISCONTINUE This is used to determine if labels should be created when orders for a patient from this ward are auto-discontinued (d/c) due to a patient movement. Patient movements include discharges and transfers. Labels are created for the ward on which the patient resided before the move took place.
- MAR HEADER LABELS This is used to determine if MAR header labels should be generated when orders are processed for patients.

• **DAYS NEW LABELS LAST** - The Unit Dose module runs a background job once a day that deletes all unprinted new labels older than the number of days specified here. If no days are specified for this field, any unprinted new labels for this site will be purged at the end of the day.

Note: A label can still be printed for an order even though it's new label record has been purged.

- MAR ORDER SELECTION DEFAULT This identifies the default for the type of orders
 to be included on MARs printed for this ward. All Medication, Non-IV medications only, IV
 piggybacks, admixtures, hyperals, and/or IV chemotherapy medication types may be
 selected. Multiple types may be specified.
- PRINT PENDING ORDERS ON MAR This is used to determine if pending orders, that
 were acknowledged by a nurse, should be included on the MARs and the Medication Due
 Worksheet.
- **'SELF MED' IN ORDER ENTRY** If the word **YES** (or a **1**) is entered here, the regular order entry process will prompt the user for SELF MED and HOSPITAL SUPPLIED SELF MED for each order entered. The abbreviated processes, ward order entry, and order sets are not affected in any way by this site parameter.
- **PRE-EXCHANGE REPORT DEVICE** This is the device that is used as a default for the Pre-Exchange Report. If the value is **null**, the user will not be prompted for a device, which will disable the printing of this report for that ward. At the time the report is run, if the user enters an output device that is different from the device in this file, the option to override this parameter and define a temporary device for the remainder of this session is displayed.

2.2.3. Fields from the INPATIENT USER PARAMETERS file (#53.45)

Note: Fields from the INPATIENT USER PARAMETERS file (#53.45) are still edited through the Inpatient Medications package.

- **INPATIENT USER** This is a user for whom the Inpatient Medications package can be tailored.
- ALLOW USER TO RENEW ORDERS If this field is set to YES, this ward clerk/pharmacy technician can actually renew patients' inpatient orders. If this is set to NO (or is not set), this clerk/technician can only mark orders for renewal by another user.

- ALLOW USER TO HOLD ORDERS If this field is set to YES, this ward clerk/pharmacy technician can actually place patients' inpatient orders on hold or take orders off of hold. If this is set to NO (or is not set), this clerk/technician can only mark orders for hold and take off of hold.
- ALLOW USER TO D/C ORDERS If this field is set to YES, this ward clerk/pharmacy technician can actually discontinue patients' inpatient orders. If this is set to NO (or is not set), this clerk/technician can only mark orders to be discontinued by another user.
- MAY SELECT DISPENSE DRUGS Unless the user is a pharmacist, the user can select only Orderable Items during the Unit Dose order entry process. A YES answer will allow the non-pharmacist user to select Dispense Drugs during order entry.
- ALLOW AUTO-VERIFY FOR USER This is used to determine if the user can enter Unit Dose orders as active, allowing the user to skip the step of manually verifying those orders entered by this user.
- **ORDER ENTRY PROCESS** This is the type of order entry process to be used by this user.
 - **Regular** order entry is the full set of prompts for the entry of an order, after which the user is shown a full view of the order and allowed to take immediate action on the order.
 - **Abbreviated** order entry gives the user fewer prompts for the entry of an order, after which the user is shown a full view of the order and is allowed to take immediate action on the order
 - Ward order entry gives the user the same prompts as the abbreviated order entry, but then gives a brief view of the entered order and does not allow immediate action to be taken on the order.

No entry here is the same as selecting **Regular** order entry.

- **PRINT PROFILE IN ORDER ENTRY** If this field is set to **YES**, the user will be given the opportunity to print a patient profile after entering Unit Dose orders for the patient.
- LABEL PRINTER POINTER This is a device to which labels created by this user will print. If a device is entered here, it will be used instead of any device selected for the ward or pharmacy to print labels.
- USE WARD LABEL SETTINGS This allows the pharmacist (or pharmacy technician) working on the ward(s) to use the label settings defined for the ward(s) instead of the label settings defined for the pharmacy.

Note: When a label printer is defined for the user, that printer will always be used to print labels instead of either the ward or pharmacy label printer.

• INPATIENT PROFILE ORDER SORT - This is the sort order in which the inpatient profile will show inpatient orders. Enter the words Medication Name (or the number 0) to show the orders alphabetically by drug name. Enter the words Start Date of Order (or the number 1) to show the order chronologically by start date, with the most recent dates showing first.

Note: The profile first shows orders by status (active, non-verified and then non-active) and then within status and schedule type (continuous, one-time and then PRN).

2.2.4. Fields from the IV ROOM file (#59.5)

Note: Fields from the IV ROOM file (#59.5) are still edited through the Inpatient Medications package.

- IV ROOM NAME This is the arbitrary name of an IV room. A site can have more than one name defined. Each IV order belongs to the IV room that input the order. An IV room can process only orders that belong to that IV room.
- **LENGTH OF LABEL** The labels can vary in height from 12 to 66 lines. Measure the height of the label and multiply that height by the number of lines per inch for which the printer is configured.

Note: If all lines of print cannot fit within the length that is defined here, the lines of print will continue to the next label. For example, the average piggyback label is three inches high. If the printer will print 6 lines per inch, the number 18 should be entered as the answer to this parameter.

• WIDTH OF LABEL - Enter the maximum allowable width of the label in number of characters. If data is not entered into this field, the default will be 30. If a line of print cannot fit within the width defined here, it will continue on the next line of the label.

- LINE FEEDS BETWEEN LABELS Enter a number between 0 and 6. This is the number of line feeds between each IV label. This parameter makes it possible to have a top and bottom margin on the IV labels.
- **END OF LABEL TEXT** Enter any "end of label" text that is wanted to print at the bottom of every IV label. Separate the lines with an up-arrow (^). For example, to have this phrase print at the bottom of the IV labels:

FILLED BY: CHECKED BY:	
must enter the following characters:	
RETURN TO IV ROOM IN 24-HOURS^FILLED BY:	
CHECKED BY:	_

- **HEADER LABEL** When set to **YES**, an extra label is generated to record lot numbers and provide a record for new orders entered since the last printing of the active order list. This extra label, together with the active order list, provides a paper backup system in the event the computer system becomes unavailable to the user.
- SHOW BED LOCATION ON LABEL The patient's ward location is always printed on the IV label. However, if bed location information is available and the user wishes to have this additional information on the label, enter YES or the number 1 in this field.
- USE SUSPENSE FUNCTIONS If the user wants the SUSPEND LABELS as a valid choice at the "ACTION:" prompt after order entry, respond with the number 1. If the user does not want any labels suspended after order entry, but rather have them printed, respond with the number 0.
- **DOSE DUE LINE** This parameter affects the printing of the dose due line on the IV label. If the number **0** is entered, the time the dose is due will not be printed on the IV label. The dose due line will be printed for Intravenous Piggybacks (IVPBs) only if the number **1** is selected, Large Volume Parenterals (LVPs) dose due line will be printed if the number **2** is selected and both IVPBs and LVPs if the number **3** is selected.

Note: LVPs include HYPERAL type orders.

• LVPS GOOD FOR HOW MANY DAYS - This number is used when the stop date of a new LVP order is computed. For example, if large volume IVs are good for 14 days and a new order is input with a start date of today, the stop date is T+14.

The user

- **HYPERAL GOOD FOR HOW MANY DAYS** This number is used when the stop date of a new hyperal order is computed. For example, if a hyperal order is good for 14 days and a new order is entered today, the default stop date is 14 days from now.
- **PBS GOOD FOR HOW MANY DAYS** This number is used when the stop date of a new piggyback order is computed. For example, if a piggyback order is good for 14 days and a new order is entered today, the default stop date will be 14 days from now.
- **SYRNS GOOD FOR HOW MANY DAYS** This field is used to determine the stop date for the IV syringe order.
- **CHEMO'S GOOD FOR HOW MANY DAYS** This field is used to determine the stop date for chemotherapy IV orders.
- **STOP TIME FOR ORDER -** Enter, in military time, the time of the day that the automatic stop of orders should occur.
- **EXPIRE ALL ORDERS ON SAME DAY** Enter the number 1 to stop all IV orders automatically on the same day. The day the orders are stopped will be the stop date of the first active IV order found in the file. The stop date that is found will be shown as a default for the stop date of the IV ORDER.
- **ACTIVITY RULER** The activity ruler provides a visual representation of the relationship between coverage times, doses due, and order start times. The intent is to provide the on-the-floor user with a way to track activity in the IV room and determine when to call for doses before the normal delivery.
- TOTAL VOL. ON HYPERAL LABELS Enter the number 1 or YES if the total volume of solutions and additives are to be displayed on all hyperal labels.
- **Select START OF COVERAGE** Enter the military time that designates the first administration time covered by this manufacturing run. In other words, if the previous manufacturing period covered up to and included the 0900 dose, the start of coverage would begin at 0901. For each START OF COVERAGE, there are the following fields:
 - **TYPE** Enter the IV type for this start of coverage period. The user can enter only one type for each period that is defined.
 - **DESCRIPTION** A description for each delivery time (3 to 30 characters) can be entered. The user will be prompted with a default description. This description will appear when manufacturing records and ward lists are requested. Using the default prompt will help lead to less confusion for the users.

- **END OF COVERAGE** Enter the military time that designates the last administration time covered by this manufacturing run. Enter midnight as 2400.
- MANUFACTURING TIME Enter the military time that designates the general time when the manufacturing list will be run and the orders prepared. This is for documentation and does not affect IV processing. Enter midnight as 2400.
- **DELIVERY TIME** Delivery time must be entered using a 24-hour clock (e.g., 9 AM is entered as 0900). Delivery time is used as a default start time for admixtures and hyperalimentations. Enter midnight as 2400.
- LABEL DEVICE Enter the name that is used most frequently as the label device for this IV room. This field displays as the default for the "Current IV LABEL device is:" prompt when signing into the IV software.
- **REPORT DEVICE** Enter the PROFILE device number or name that will be used most frequently by this IV room. This field displays as the default for the "Current IV REPORT DEVICE:" prompt when signing into the IV software.
- **INACTIVATION DATE** This is used to place an IV room out of service. Once the inactive date is reached, the IV room will no longer be selectable in IV Order Entry options.
- **DAYS TO RETAIN IV STATS** This is used to allow the site to specify the number of days to keep data in the IV STATS file (#50.8).

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